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Maximizing Benefits through Responsible Conduct of Research

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Fostering Responsible Open Science into One Health in India

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ROSiE

Exploring Open Science and One Health: The ROSiE project's perspective

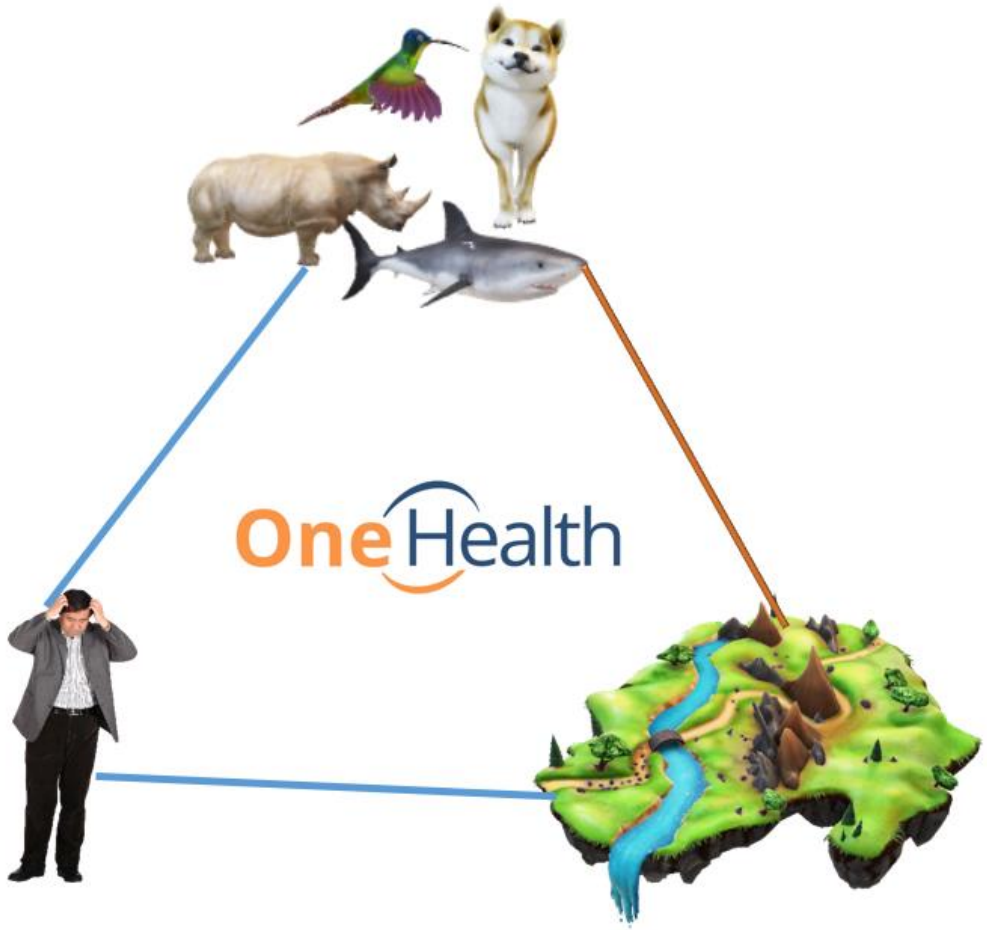
This project has received funding from the European Union's Horizon 2020 research and innovation programme under GA No 101006430

Overview

1. Background
2. Scoping review of the challenges and opportunities in One Health
3. Methodology
4. Results and conclusion

Background

- One Health (OH) is a collaborative, and multisectoral concept implemented in public health [1]
- Lack of aiding policies & institutional capacities; difficult to evaluate the impact of OH in India [2]
- Incorporating Open Science into OH would form a solid basis for ensuring research integrity in OH research [3]



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Objectives

Identify ELSI in OH- Scoping review

Explore opportunities & inequities (Mixed methods)

Develop a framework (Normative theory)

Study population (One Health researchers)

- Epidemiologists
- Veterinarians
- Ecologists
- Policymakers
- Citizen Scientists

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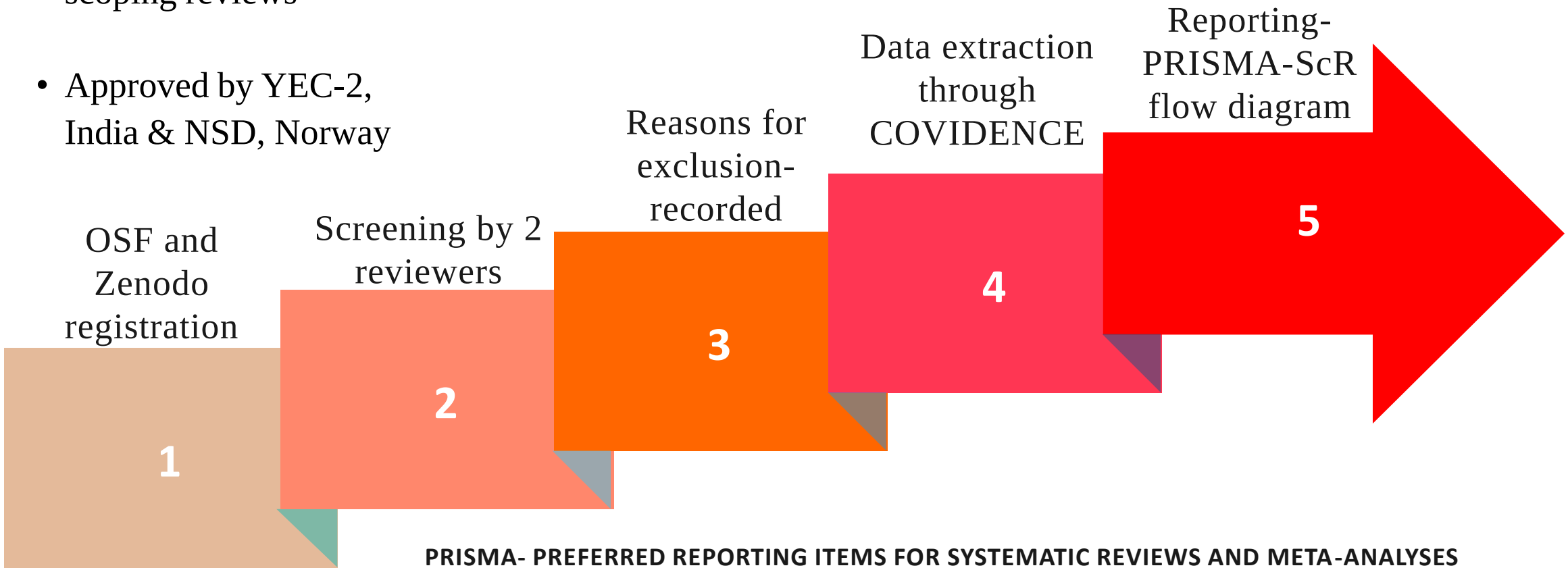
SCOPING REVIEW- STUDY TOOLS & TECHNIQUE

- JBI (Joanna Briggs Institute) template for scoping reviews
- Approved by YEC-2, India & NSD, Norway



PRISMA- PREFERRED REPORTING ITEMS FOR SYSTEMATIC REVIEWS AND META-ANALYSES EXTENSION FOR SCOPING REVIEWS

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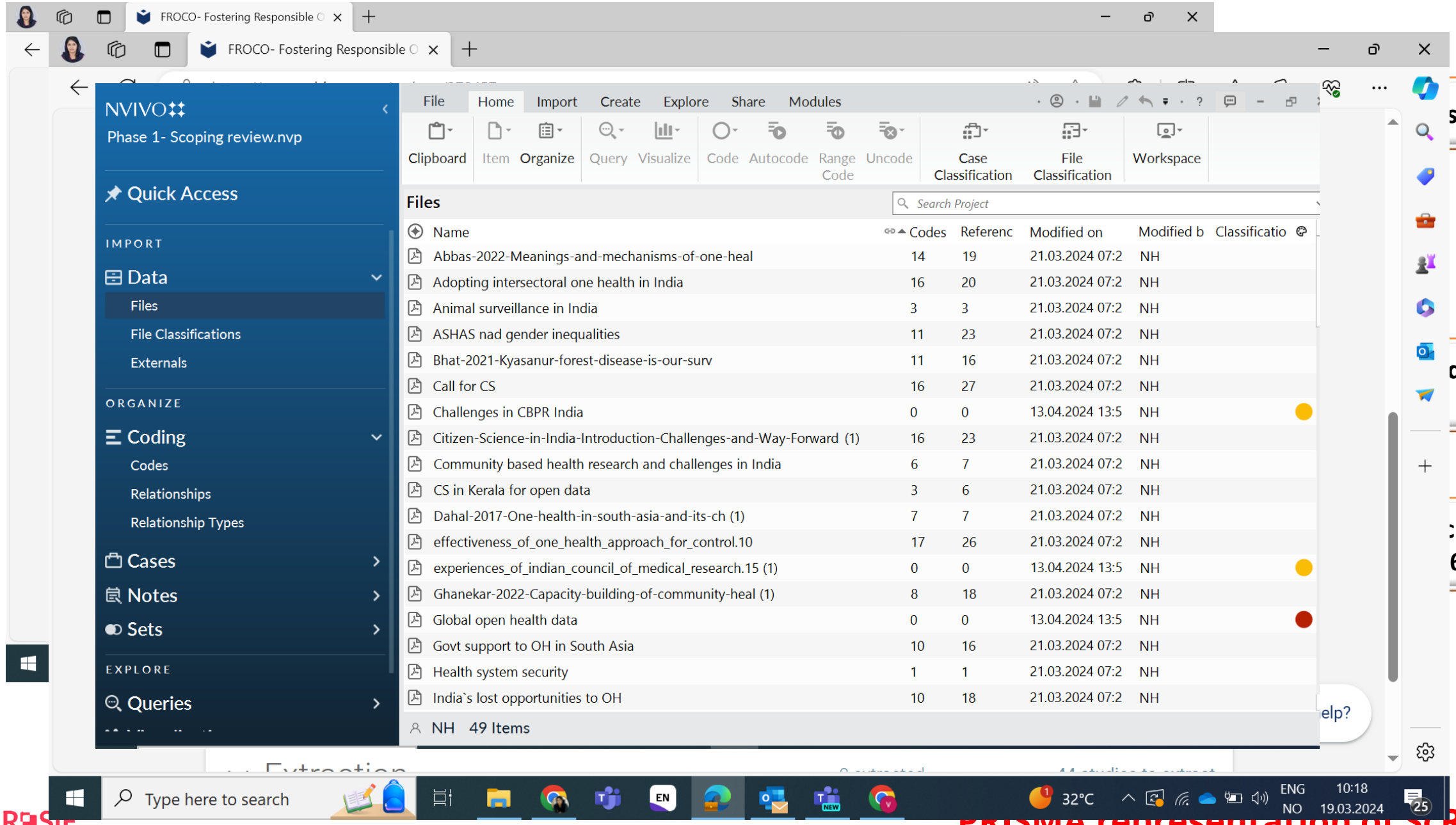
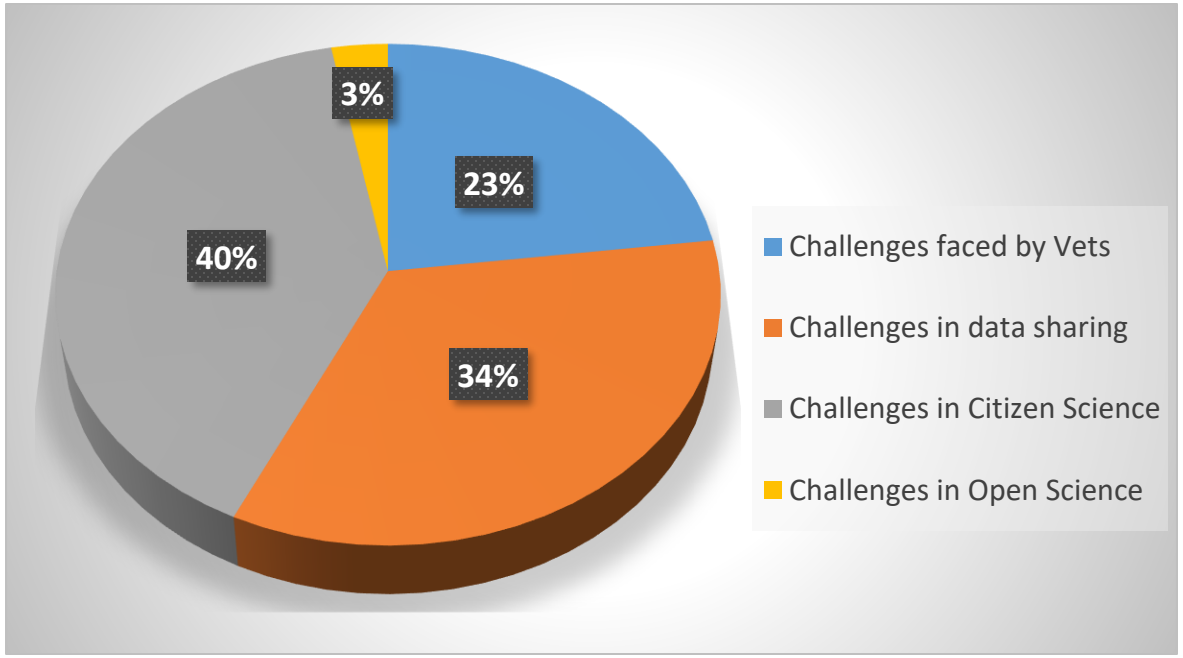
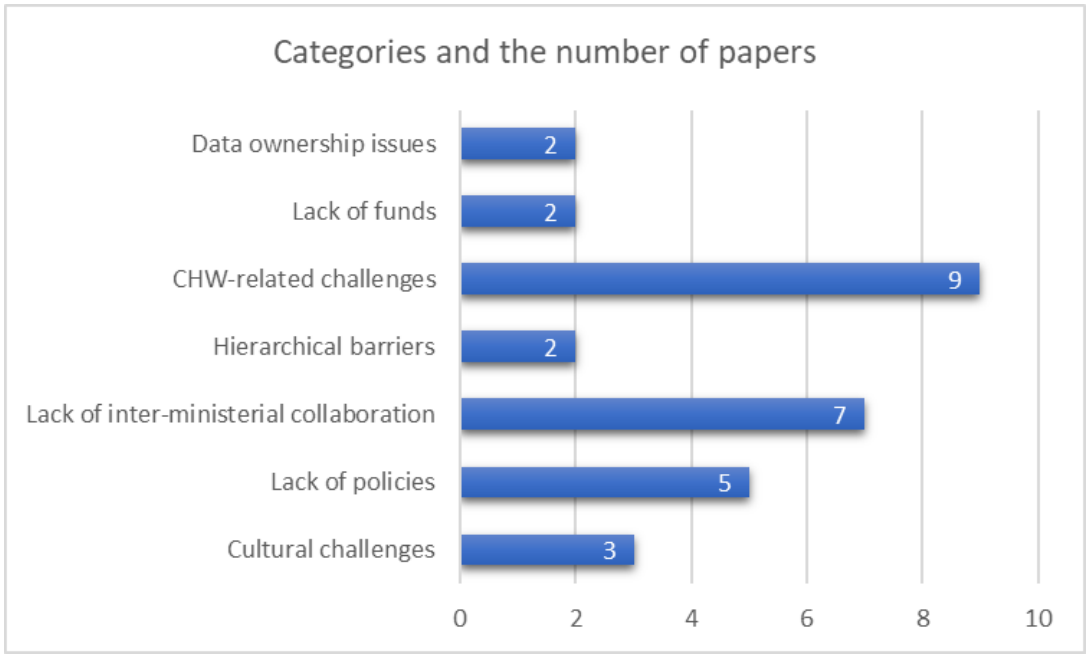


PRISMA representation of SCR

Results contd..



Challenges & no. of papers



Categories & no. of papers

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Discussion

A Institutional level

- limited infrastructure, funds [3-5]
- lack of zoonotic disease knowledge [4]
- Inadequate training, unclear reporting systems [5]
- political conflicts between different sectors [5]
- limited engagement from stakeholders from other disciplines [2]

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B National level

Challenges in collaboration

Cultural challenges, limited infrastructure, limited involvement of non-scientific community, lack of inter-ministerial collaboration, hierarchical barriers [6-9] limited focus on Vets [10]

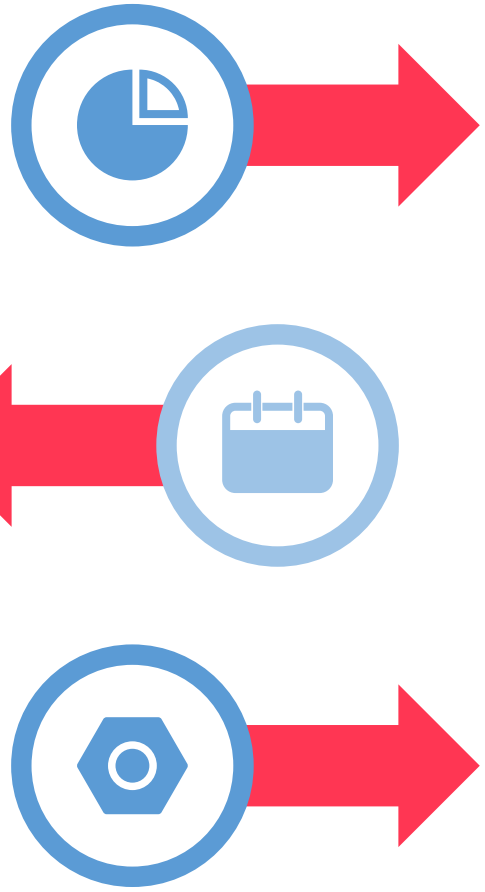
Challenges in data sharing

No official strategies to facilitate data sharing, lack of tools to capture field data, confidentiality issues, community health worker-related challenges [2,3,7,11]

Challenges in Open Science

Increasing article processing charges, Lack of funds, publication inequality, limited awareness about Citizen Science, lack of funds for community-driven projects [12]

Scope for improvement



One Health

- One Health committees [13]
- Frameworks & policies
- Assessment tools
- Context-specific cross sectoral collaborations [2]

Citizen Science

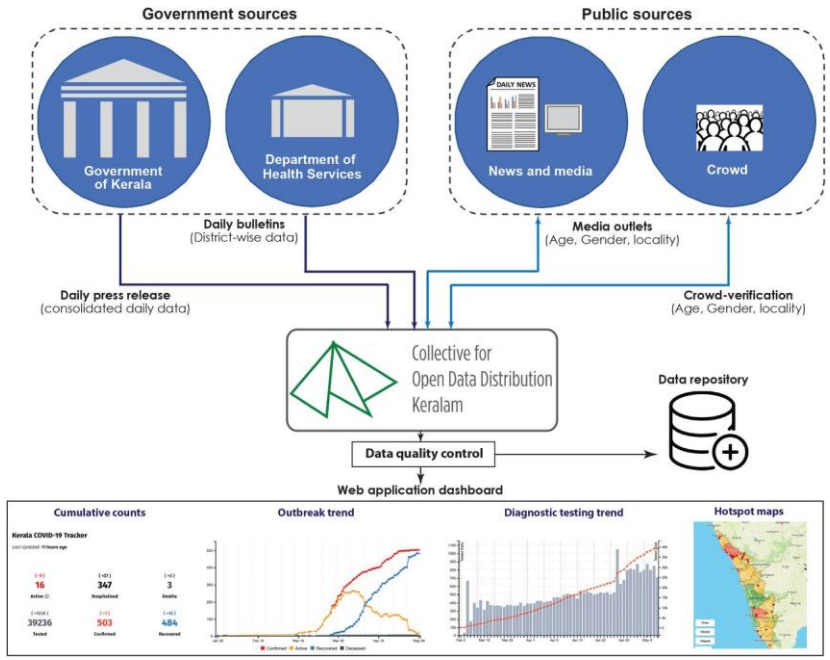
Techniques to improve Citizen Science [12]
Guideline for Citizen Science [14]
Digitalised participatory data generation
Data visualization to make results understandable [15]

Open Science

Open Science programs
Joint education for professionals
Need for equitable participation of stakeholders [12]

Enablers

- One Health centric guidelines- developed for each countries [7]
- Open Science Framework through 5th STI policy draft) by DST [12, 14]



Data visualization dashboard

https://www.medrxiv.org/content/10.1101/2020.05.13.20092510v2.full

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Conclusion

- Lack of inter-ministerial collaboration
- Hierarchical barriers
- Confidentiality issues
- limited awareness about Citizen Science

Limitations

- The challenges identified may be a reflection of the current nascent stage of One Health in India.
- The findings may not fully capture the potential challenges that may arise in the future as the field evolves.

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Acknowledgement

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Thank You

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